



UNITED STATES PATENT AND TRADEMARK OFFICE

Cal

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,119	09/30/2003	Atsushi Shinozaki	KAW-0046	4968
23413	7590	08/25/2005	EXAMINER	
CANTOR COLBURN, LLP 55 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002			KIANNI, KAVEH C	
			ART UNIT	PAPER NUMBER
			2883	

DATE MAILED: 08/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/675,119

Applicant(s)

SHINOZAKI ET AL.

Examiner

Kianni C. Kaveh

Art Unit

2883

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 8 is/are rejected.
- 7) ☒ Claim(s) 1,2,4-6 and 9-11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.



Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The amendment submitted on May 13, 2005 will not be entered. The reason for not entering such amendment is that the amendment containing the new limitations 'each base plate' having a different coefficient of linear thermal expansion from said pedestal, suggests that the coefficient of thermal expansion of each base plate is different than that of other base plate when compared to that of the thermal expansion of pedestal. Such suggestion is a new matter that was never disclosed in any part of the specification.

Specification

The disclosure, filed on 9/30/2003, is objected to because of the following informalities: at least in pages, 8, 1st and 2nd parag. and page 2, line 16, the element 3 has three different meanings. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 2883

Claims 1, 2 are ambiguous, since the limitation 'each base plate having a different coefficient of linear thermal expansion from said pedestal' is not specified. IT is not clear from the limitation whether the applicant suggests that each base plate has different coefficient of thermal expansion (CTE) from that of pedestal because the CTE of the base plates are different from each other or that the base plates have different CTE from that of pedestal. Corrections are required. Claims 3-12 depend on their respective base claim and therefore they are also rejected.

Allowable Subject Matter

Claims 4-7 and 9-12 are objected to as being dependent upon a rejected base claim, but would be allowable if their respective base claims are no longer rejected under USC 12 Second Paragraph, and appropriate corrections are made and rewritten in independent form including all of the limitations of the base claim and any intervening claims. These claims once the corrections are made allowable, since the prior art of the record, alone or in combination, in combination with the rest of the limitations of the base claim does not teach their perspective limitations (of dependent claims).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2883

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 1-3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takabayashi et al. (US 6522809).

Regarding claims 1 and 2, Takabayashi teaches an optical fiber grating part (shown in at least fig. 5B) comprising; an elongated pedestal 7, and base plates 4 installed on said pedestal 7, and each base plate having a different coefficient of thermal expansion from said pedestal 7 (see at least col. 14, 4th parag.), and an optical fiber passing through said pedestal 7, and connected to connection points 6 installed on said pedestal 7 or said base plate located apart from each other in the longitudinal direction of said pedestal (see figures 15a,b, items fiber and connection points 6 and col. 10, lines 59-61) and having an optical fiber grating 2 located between said connection points 6, wherein a predetermined tensile force 8 is added to said optical fiber grating 2, and said pedestal and said base plates thermally expand or thermally shrink independently in the longitudinal direction of said pedestal 7 (see col. 14, 5th parag.); and an extension line of an axis of said optical fiber 1 joining said connection

Art Unit: 2883

points 6 passes through a contact surface between said pedestal 7 and said base plate 4 or 114 (see at least fig. 45, item fiber 1 passing through and contacts material 119 in which the contact surface is located between pedestal and base plate(s)).

However, Takabayashi does not specifically teach wherein the above coefficient of thermal expansion is 'coefficient of linear thermal expansion'. However, as shown at least in fig. 16, the bragg wavelengths λ_{1-n} linearly change with applied voltage in which. Thus, it is obvious/well-known to those of ordinary skill in the art when the invention was made that linear change in bragg wavelengths λ_{1-n} as function of applied voltage/heat is/known-as related to coefficient of linear thermal expansion, since such linearity would allow controlling of the bragg wavelength more easily than in the prior art after production (see col. 4, 2nd parag.).

Regarding claims 3 and 8, Takabayashi further teaches wherein a pair of said base plates are installed apart from each other in the longitudinal direction of said pedestal and each said base plate has said connection points respectively (shown at least in fig. 15b, each plate 4 has connection points 6);

Response to Arguments and Amendment

Applicant's argument filed on 6/13/05 have been fully considered but they are not persuasive.

Applicant alleges (page 10, 2nd and 3rd parag.) that Takabayashi does not teach or suggest "connection point" in which an optical fiber passing through said pedestal

and connected to connection points installed on said pedestal. The examiner responds that the alleged limitations in the claim is 'connection points' and not "connection point", secondly, Takabayashi teaches the claimed invention limitation as stated in claims 1 and 2, wherein an optical fiber passing through said pedestal 7, and connected to connection points 6 installed on said pedestal 7 or said base plate located apart from each other in the longitudinal direction of said pedestal (see figures 15a-b, item connection points 6 which the fiber is connected to connection points 6; also col. 10, lines 59-61).

Applicant alleges (page 10, 2nd and 4th parag.) that Takabayashi does not teach or suggest "the extension line" and "the contact surface" as claimed in claim 1.

The examiner responds that Takabayashi teaches the claimed invention limitation as stated in claims 1 wherein said pedestal and said base plates thermally expand or thermally shrink independently in the longitudinal direction of said pedestal 7 (see col. 14, 5th parag.); and an extension line of an axis of said optical fiber 1 joining said connection points 6 passes through a contact surface between said pedestal 7 and said base plate 4 or 114 (see at least fig. 45, item fiber 1 passing through and contacts material 119 in which the contact surface is located between pedestal and base plate(s)).

- As the examiner kindly suggested to Ms. Bae on 8/17/05, the applicant needs to appropriately narrow the scope of the invention in order to have the case allowed.

THIS ACTION IS MADE FINAL

This action in response to applicant's amendment made FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to K. Cyrus Kianni whose telephone number is (571) 272-2417.

The examiner can normally be reached on Monday through Friday from 8:30 a.m. to 6:00 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font, can be reached at (571) 272-2415.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9306 (for formal communications intended for entry)

Art Unit: 2883

or:

Hand delivered responses should be brought to Crystal Plaza 4, 2021 South Clark Place, Arlington, VA., Fourth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group Receptionist whose telephone number is (703) 308-0956.



**KAVEH KIANNI
PRIMARY EXAMINER**

K. Cyrus Kianni
Patent Examiner
Group Art Unit 2883

December 9, 2004